VINOGRADOVA, V.A.; MENDRIK, E.V.; SARAYEVA, [illegible].M.; [illegible]

Experimental data on the dependence of metastasizing on hormonal influences. Neoplasma (Bratisl.) 11 no.6:561-570 '64

1. Iz laboratorii patologicheskoy fiziologii Gosudarstvennogo onkologicheskogo instituta imeni P.A.Gertsena, Moskva, SSSR.

VINOGRADOVA, V.A

PAUL', I.I., nauchnyy sotrudnik; VINOGRADOVA, V.A., nauchnyy sotrudnik;
MEDVEDEVA, I.V., nauchnyy sotrudnik

A micromethod for the determination of tin in the air. Gig. i san.
22 no.3:83-86 Mr '57. (MIRA 10:6)

1. Iz Novosibirskogo nauchno-issledovatel'skogo sanitarnogo
instituta.
(AIR POLLUTION, determ.
tin, micromethod)
(TIN, determ.
in air, micromethod)

VINOGRADOVA, V.A.

Determination of para-toluidine vapors in the air of industrial buildings. Gig. i san. no.11:48 N '54. (MLRA 7:12)

1. Iz gazoanaliticheskoy laboratorii Novosibirskogo nauchno-issledovatel'skogo instituta.

(TOLUENE, dirivatives
p-toluidine vapors determ. in air in indust.)
(INDUSTRIAL HYGIENE
p-toluidine vapors in air determ.)
(AIR POLLUTION
p-toluidine vapors in indust. determ.)

KHOROVER, N.N.; AVIDON, D.B., zaveduyushchiy; VINOGRADOVA, V.A., glavnyy vrach; SHATSKIY, A.V., professor, zaveduyushchiy kafedroy.

Fibroma of the mesentery of the small intestine in a child. Vest.khir. 73 no.5:60-61 S-O '53. (MLRA 6:11)

1. Khirurgicheskoye otdeleniye detskoy bol'nitsy im. doktora Raukhfusa (for Avidon). 2. Detskaya bol'nitsa im. doktora Raukhfusa (for Vinogradov). 3. Kafedra khirurgii detskogo vozrasta Leningradskogo gosudarstvennogo pediatricheskogo meditsinskogo instituta (for Shatskiy). (Mesentery--Tumors)

DOBRICH, Adal'bert [Dobrić, Adalbert]; ALIKHODZHICH, Asim [translator];
PISAREV, I.Yu., prof., red.; KABACHNIK, Ya.I., red.; LATYSHEV,
A.I., red.; VINOGRADOVA, V.A., tekhn.red.

[Industrial statistics] Promyshlennaia statistika. Pod red.
I.IU.Pisareva. Moskva, Gos.stat.izd-vo, 1959. 291 p.
(MIRA 13:3)

(Industrial statistics)

VINOGRADOVA, V.A. (Novosibirsk)

Determination of rhodaniline in the air. Gig. truda. i prof. zab. 4 no.6:56-57 Je '60. (MIRA 15:4)

1. Nauchno-issledovatel'skiy sanitarnyy institut, Novosibirsk.
(ANILINE) (AIR--POLLUTION)

VINOGRADOVA, V.A. (Novosibirsk)

Determination of small amounts of hydrogen sulfide in the air. Gig. truda i prof. zab. 4 no.2:53-54 F '60. (MIRA 15:3)

1. Sanitarnyy institut, Novosibirsk.
(AIR—ANALYSIS)
(HYDROGEN SULFIDE)

KHRENOV, Leonid Sergeyevich, prof.; NEDESHEVA, Lyudmila Pavlovna; VINOGRADOVA, Valeriya Arsen'yevna; GOLUBKIN, Vladimir Mikhaylovich; SHURYGINA, A.I., red. izd-va; ROMANOVA, V.V., tekhn. red.

[Handbook on calculating analytical nets]Rukovodstvo po vychisleniiam analiticheskikh setei. Moskva, Geodezizdat, 1962. 247 p. (MIRA 15:9)

(Triangulation)

VINOGRADOVA, V. D.

Effect of hormonal influences on Brown-Pearce metastasizing tumors. Vop. onk. 8 no.3:77-81 '62. (MIRA 15:4)

1. Iz patofisnologicheskoy laboratorii (zav. - kand. med. nauk I. P. Tereshchenko) Gosudarstvennogo onkologicheskogo instituta im. P. A. Gertsena (dir. - prof. A. N. Novikov)

(SKIN—CANCER) (HORMONES, SEX)

VINOGRADOVA, V. D

PA-75T72

USSR/Medicine - Sarcoma, Experimental May/Jun 1948
Medicine - Mice

"Comparative Results of Intracutaneous and Subcutaneous Injections of Antireticular Cytotoxic Serum on the Growth of Transplanted Sarcoma in Mice," V. D. Vinogradova, Moscow Pathophysiol Dept, Cen Oncological Inst imeni P. A. Gertsena, 4 pp

"Arkhiv Patologii" Vol X, No 3

Reports series of experiments performed by author on mice: intracutaneous, 83; subcutaneous, 79; control, 90. Positive results of sarcoma transplantation were 49.4 ± 5.5%, 77.2 ± 4.7% and 92.2 ± 2.8%, respectively. Intracutaneous injection, therefore, con-

[redacted]

75T72

USSR/Medicine - Sarcoma, Experimental (Contd) May/Jun 1948

siderably lowers susceptibility of mice to sarcoma.

[redacted]

75T72

VINOGRADOVA, V. D., Physician

Dissertation: "Experiment for Studying a Specific and Nonspecific Non-Susceptibility to Malignant Tumors." Cand. Med. Sci.

30/1/50

Second Moscow State Medical Inst. imeni. I. V. Stalin

SO Vecheryaya Moskva
Sum 71

VINOGRADOVA, V D

PODZEY, L.K.; VINOGRADOVA, V.D.

Effect of prolonged administration of soporifics on the growth and metastasization of Brown-Pearce tumor in rabbits. Vop.onk. 1 no.2:28-32 '55. (MLRA 8:10)

1. Iz Gosudarstvennogo onkologicheskogo instituta im. P.A.Gertsena (i.o.dir. V.V.Gorodilova)
(NEOPLASMS, experimental,
Brown-Pearce carcinoma, eff. of hypnotics)
(HYPNOTICS AND SEDATIVES, effects,
on Brown-Pearce carcinoma)

VINOGRADOVA, V.D. (Moskva)

Disorders of the higher nervous activity in rats under conditions of acute artificial pneumothorax. Pat.fiziol.i eksp.terap. 4 no.2: 68 Mr-Ap '60. (MIRA 14:5)

1. Iz Gosudarstvennogo onkologicheskogo instituta imeni P.A.Gertsena (dir. - prof. A.N.Novikov, nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR zasluzhennyy deyatel' nauki A.I.Savitskiy).
(PNEUMOTHORAX) (CONDITIONED RESPONSE)

VINOGRADOVA, V.D.

USSR/Medicine - Oncology

FD-2565

Card 1/1 Pub. 17-18/23

Author : Vinogradova, V. D.; Piontkovskiy, I. A.; Podzey, L. K.

Title : Experiments in transplantation of a Brown-Pearce tumor into tongue tissue

Periodical : Byul. eksp. biol. i med. 5, 65-67, May 1955

Abstract : Discusses and gives results of experimental transplantation of Brown-Pearce tumors into the tongue of rabbits. Photograph. No references.

Institution : Pathophysiology Laboratory (Head - Prof I. A. Piontkovskiy) of the State Oncology Institute imeni P. A. Gertsen (Scientific Director - Prof A. I. Savitskiy, Corresponding Member of the Academy of Medical Sciences USSR; Acting Director - V. V. Gorodilova, Kandidat of Medical Sciences)

Submitted : June 22, 1954 by L. A. Zil'ber, Member of the Academy of Medical Sciences USSR

PODZEY, L.I.; VINOGRADOVA, V.D.

Results of heterogenic transplantation of a Rous sercoma in decrebrated and normal pigeons. Biul.eksp.biol.med. 42 no.7:54-57 Jl '56.
(MLRA 9:9)

1. Iz Gosudarstvennogo onkologicheskogo instituta imeni P.A.Gertsena (dir. - doktor meditsinskikh nauk prof. A.N.Novikov; nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR prof. A.I.Savitskiy) Predstavlena deystvitel'nym chlenom AMN SSSR N.N.Petrovym.

(SARCOMA, transplantation,
Rous sarcoma, in decerebrated & normal pigeons (Rus))
(NEOPLASMS, transplantation,
same)
(BRAIN,physiology,
eff. of decerebration on transplanted Rous sarcoma in pigeons (Rus))

[illegible]

VINOGRADOVA, V.D.

Minutes of the session of the Society of Oncologists of Moscow and Moscow Province held on Jan. 24, 1957. Vop.onk. 3 no.3:376-378 '57.
(ONCOLOGY)
(MLRA 10:8)

VINOGRADOVA, V.D.

[redacted]

Minutes of a ~~metting~~ Meeting of the Moscow and Moscow Province Society of Oncologists, September 26, 1957. Vop.onk. 4 no.4:507-508 '58

(TUMORS) (MIRA 11:9)

VINOGRADOVA, V.D.

Minutes of a joint meeting of the Moscow and Moscow Province Society of Oncologists and the Gynecological Society, September 25, 1958.
Vop.onk. 5 no.7:120-121 '59. (MIRA 12:12)
(CANCER)

VINOGRADOVA, V.D., kand.med.nauk

Minutes of a meeting of the Moscow and Moscow Province Society of Oncologists, October 30, 1958. Vop.onk. 5 no.8:239-240 '59 (MIRA 12:12)

(TUMORS)

VINOGRADOVA, V.D., kand.med.nauk

Minutes of a session of the Moscow and Moscow Province Society of Oncologists, December 25, 1958. Vop.onk. 5 no.8:243-244 '59.

(MIRA 12:12)

(CANCER)

VINOGRADOVA, V.D. (Moskva, G-34, Metrostroyevskaya ul., d.20, kv.4

Effect of sex hormones on the Metastasis of the Brown-Pearce tumor.
Vop. onk. 10 no.2:105-108 '64. (MIRA 17:7)

1. Iz patofiziologicheskoy laboratorii (zav. - kand. med. nauk
I.I. Tereshchenko) Gosudarstvennogo onkologicheskogo instituta
imeni P.A. Gertsena (dir. - prof. A.N. Novikov).

VINOGRADOVA, V.D.

Effect of conditioned reflex activity on carcinogenic growth in animals. Vop.onk, 6 no.2:73-76 F '60. (MIRA 14:2)
(CANCER) (CONDITIONED RESPONSE)

VINOGRADOVA, V.D.

Effect of pneumothorax on the process of metastatic spreading of a Brown-Pearce tumor into the lung in the rabbit. Biul. eksp. biol. i med. 50 no. 11:95-98 N '60. (MIRA 13:12)

1. Iz patofiziologicheskoy laboratroii (zav. - kandidat meditsinskikh nauk I.P. Tereshcheko) Gosudarstvennogo onkologicheskogo instituta imeni P.A. Gertsena (dir. - prof. A.N. Novikov, nauchnyy rukovoditel'-deystvitel'nyy chlen AMN SSSR zasluzhennyy deyatel' nauki prof. A.I. Savitskiy), Moskva.

(CANCER) (PNEUMOTHORAX) (LUNGS--CANCER)

VINOGRADOVA, V. D., PODSEY, L. K., SARAYEVA, S. M. , MANDRIK, E. V. and SHIPIKOV, K. G.

"Resistance of the organism and some peculiarities of the metastatic period."

report submitted for the European Conference on Tumor Biology (UICC),
Warsaw, Poland
22-27 May 1961

Vinogradova, V. D.-State Herzen Oncological Inst., 2, Botkinsky proezd 3, Moskva

MAKSIMENKOV, Aleksey Nikolayevich, prof.; BELYAYEV, V.I., kand. med. nauk; VINOGRADOVA, V.G., kand. med. nauk; ZAYTSEV, Ye.I., dots.; ZOLOTAREVA, T.V., prof.; MIKHAYLOV, A.G.; MIKHAYLOV, S.S., prof.; YELISEYEV, V.A., red.; KHARASH, G.A., tekhn. red.

[Internal structure of the stems of peripheral nerves] Vnutristvol'noe stroenie perifericheskikh nervov. Leningrad, Medgiz, 1963. 374 p. (MIRA 16:9)

1. Chlen-korrespondent AMN SSSR (for Maksimenkov).
(NERVES, PERIPHERAL)

VINOGRADOVA, V.G.; SHELIMOV, B.N.; FOK, N.V.; VOYEVODSKIY, V.V.

Low temperature decomposition of hydrocarbons photosensibilized by some benzene derivatives. Dokl. AN SSSR 154 no.1:188-190 Ja'64. (MIRA 17:2)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova i Institut khimicheskoy fiziki AN SSSR. 2. Chlen-korrespondent AN SSSR (for Voyevodskiy).

Investigation of some semiconducting compounds of the type $B_2^{I}B^{IV}C_3^{VI}$.
L. I. Berger, N. A. Bul'onkov (10 minutes).

Investigation of solid solutions InSb-InAs. . I. K. Shukina,
T. I. Kholmakova, V. G. Vinogradova, O. V. Mlodzeyevskaya, Yu. V.
Oboznenko, L. M. Skhol'nikova (10 minutes).

Report presented at the 3rd National Conference on Semiconductor Compounds,
Kishinov, 16-21 Sept 1963

SHKOLYAR, T.T., dotsent; ABAKUMOVA, Ye.A., kand.med.nauk; TSUPROVA, N.D.; TUROBOV, V.A.; ANTONOVA, N.I.; IVANOVA, A.I.; KREKSHINA, V.Ye.; ROZHNOVA, R.A.; VINOGRADOVA, V.G.; DAVYDOVA, L.P.

Aanalysis of patients' visits and therapeutic work in the therapeutic section of a stomatologic polyclinic. Stomatologiia 41 no.5:25-29 S-O '62. (MIRA 16:4)

1. Iz kafedry terapevticheskoy stomatologii (ispolnyayushchiy obyazannosti zaveduyushchego - dotsent T.T.Shkolyar) Kalininskogo gosudarstvennogo meditsinskogo instituta.
(STOMATOLOGY) (DENTAL CLINICS)

L 26752-66 EWT(m)/T/EWP(t) IJP(c) JD

ACC NR: AP6011482 SOURCE CODE: UR/0070/66/011/002/0352/0354

AUTHOR: Bovina, L. A.; Vinogradova, V. G.; Poluboyarinova, M. F.; Smirnova, Ye. A.; Kharakhorin, F. F.

72
B

ORG: none

TITLE: Sectorial structure of sirgle crystals of indium antimonide doped with germanium

27 K 27 27

SOURCE: Kristallografiya, v. 11, no. 2, 1966, 352-354

TOPIC TAGS: indium compound, antimonide, electric conductivity, thermal emf, crystal strucure, single crystal, semiconductor conductivity, crystal growth

ABSTRACT: The authors investigated the transverse inhomogeneity in the conductivity in single crystals of indium antimonide doped with germanium to an excess-acceptor density 10^{12}--10^{14} cm^{-3}. The crystals were grown by the Czochralski method in the [111] and [211] directions at an inert gas pressure of 600 mm Hg. The conductivity inhomogeneity was determined from the sign of the thermal emf measured at liquid-nitrogen temperature. Most crystals grown in the [111] direction had n-type regions in the center and most frequently in the uppermost section of the crystal. With increasing crystal length, the entire section assumes a p-type conductivity and only a narrow ring of n-type (0.1--0.2 mm) appears on the edges of the plates cut from the crystal. In the [211] direction only peripheral n-type regions are produced. The results are attributed to the bending of the crystallization front and to varia-

2

Card 1/2 UDC: 548.52

L 26752-66

ACC NR: AP6011482

tion of the ratio of the effective donors through the volume of the crystal. It is therefore concluded that the inhomogeneities in the conductivity type in the transverse direction of weakly doped single crystals are due to residual donor impurities. Orig. art. has: 3 figures and 1 formula.

SUB CODE: 20/ SUBM DATE: 07Jan65/ ORIG REF: 001/ OTH REF: 002

Card 2/2

VINOGRADOVA, V.G.; SHELIMOV, B.N.; FOK, N.V.

Stabilization of atomic hydrogen in the benzene-photosensitized decomposition of hydrocarbons in the presence of silica gel at 77°K. Kin.i kat. 5 no.6:1121 N-D '64. (MIRA 18:3)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova, khimicheskiy fakul'tet i Institut khimicheskoy fiziki AN SSSR.

ACCESSION NR: AP4010761 S/0020/64/154/001/0188/0190

AUTHOR: Vinogradova, V. G.; Shelimov, B. N.; Fok, N. V.; Voyevodskiy, V. V. (Corresponding member)

TITLE: Photosensitization decomposition of hydrocarbons at low temperatures by benzene derivatives

SOURCE: AN SSSR. Doklady, v. 154, no. 1, 1964, 188-190

TOPIC TAGS: benzene derivative, hydrocarbon, aromatic hydrocarbon, hydrocarbon decomposition, photosensitized decomposition, toluene, ethylbenzene, iso-propylbenzene, p xylene. diphenylmethane, chlorobenzene, triphenylmethane, fluorobenzene, acetophenone, ultraviolet light, o xylene, m xylene

ABSTRACT: Diluted solutions of benzene derivatives, such as toluene, ethylbenzene, iso-propylbenzene, o, m and p-xylene, diphenylmethane, triphenylmethane, fluorobenzene, chlorobenzene and acetophenone in 3-methyl pentane and deuterium-containing 3-methyl pentane were subjected to ultraviolet light at 77 C. Hydrogen was isolated and 3-

Card 1/3

ACCESSION NR: AP4010761

ASSOCIATION: Moskovskiy gosudarstvenny*y universitet im. M.V. Lomonosova (Moscow State University), Institut khimicheskoy fiziki, AN SSSR (Institute of Chemical Physics, AN SSSR)

SUBMITTED: 03Sep63 DATE ACQ: 10Feb64 ENCL: 00

SUB CODE: OC NR REF SOV: 004 OTHER: 011

Card 3/3

ACCESSION NR: AP4010761

methylpentyl radicals were formed in all cases except in C_6H_5F, C_6H_5Cl and C_6H_5COCH solutions. The initial rate of H_2 evolution was measured and related to the concentration of the triplet state of aromatic molecules. The data agrees with the assumption that molecules of aromatic compounds in the triplet state participate in the photosensitization reaction. The energy of the triplet levels of the aromatic compounds is not higher than 78-85 kcal/mole. The relationship between the rate of the formation of hydrogen and alkyl radicals for toluene and benzene solutions depending on light intensity is investigated and the data are tabulated. The longer life of aromatic molecules in the excited triplet state makes it possible to absorb one more light quantum while passing to the higher triplet level, and owing to the energy excess (as compared to the energy needed to rupture the CH links) causes the photosensitization decomposition of the solvent molecules. Orig. art. has: 1 table.

Card 2/3

L 18063-66 EWT(1)/EWT(m)/T/EWP(t) IJP(c) JD
ACC NR: AP6003361 SOURCE CODE: UR/0363/66/002/001/0032/0036

AUTHOR: Kharakhorin, F. F.; Poluboyarinova, M. P.; Vinogradova, V. G.

56
B

ORG: none

21,44,55

TITLE: Effect of certain factors on the process of change of the conductivity sign during thermal treatment of n-InSb

14 v1

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 2, no. 1, 1966, 32-36

TOPIC TAGS: electric conductivity, indium compound, antimonide, metal diffusion

ABSTRACT: The study was made in order to determine the effect of thermal treatment under various conditions on the properties of n-type indium antimonide. Under suitable conditions of treatment (temperature, annealing time) in quartz ampoules (in a vacuum, in helium, krypton, and antimony vapor), the n-InSb samples with carrier concentrations of 10^{13}-10^{14} cm^{-3} change their conductivity to hole conductivity over their entire volume while keeping approximately the same carrier concentration. The complex process of n-p transformation of InSb is thought to be due to the simultaneous and probably mutual influence of three factors, of which the

UDC: 546.682'861-162:537.311.33

Card 1/2

L 18063-66
ACC NR: AP6003361

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predominant one is the migration of rapidly diffusing acceptor impurities over the surface and volume, the two others being the exodiffusion of antimony giving rise to acceptor levels in the sample, and the exodiffusion of indium. From the rate of displacement of the front of sign change, the limits of the diffusion coefficients of acceptor impurities were found to be 2.5--7.0 x 10^5. On the basis of these values, it is concluded that copper is the main impurity responsible for the process of conductivity sign inversion in indium antimonide. Orig. art. has: 3 figures and 2 tables.

SUB CODE: 11,20 / SUBM DATE: 26Jun65 / ORIG REF: 007 / OTH REF: 004

Card 2/2 SML

VINOGRADOVA, V.I.

Experimental study of the kinematic structure of suspension-carrying flow. Soob. AN Gruz. SSR 32 no. 1:109-116 O '63.
(MIRA 17:9)

1. Institut energetiki imeni Didebulidze. AN GruzSSR. Predstavleno chlenom-korrespondentom AN GruzSSR P.G.Shengeliya.

VINOGRADOVA, V.I.

Distribution of the concentration of suspended particles along the cross section of a free flow. Trudy Inst.energ.AN Gruz.SSR 16:3-12 '62. (MIRA 16:4)

(Rivers) (Water supply)

L 32589-66 EWT(l)/EWT(m)/FCC/EWA(h) GS/GW

ACC NR: AT5023948 UR/0000/65/000/000/0345/0350

AUTHOR: Gedeonov, L.I; Vinogradova, V.K.; Rosyanov, S.P.; Gritchenko, Z.G. /3
B+1

ORG: None

TITLE: Accumulation of Sr^{90} and Cs^{137} in the soils of the Leningrad region

SOURCE: Nauchnaya konferentsiya po yadernoy meteorologii. Obninsk, 1964. Radioaktivnyye izotopy v atmosfere i ikh ispol'zovaniye v meteorologii (Radioactive isotopes in the atmosphere and their utilization in meteorology); doklady konferentsii. Moscow, Atomizdat, 1965, 345-350 18

TOPIC TAGS: radioactive fallout, isotope, radioactive contamination

ABSTRACT: Accumulation of the radioactive products of nuclear explosions in the soil is related to the basic problem of contamination of the biosphere. The soil is an effective retainer of the isotopic fallout, which acquires here an access to the channels of food and nutrition. This work reports data on the contents of Cs^{137} and Sr^{90} in soil samples taking during 1958-1962 in the region of Petrokrepost', as well as data on cumulative deposits of the isotops. Soil samples, 20 x 20 cm. were cut from the surface of a horisontal open meadow plot each October. The sample depth was governed by the distribution of the fallout in depth and was 5 cm. for Sr^{90} and 1 cm. for Cs^{137}.

2

UDC: None

Card 1/3

L 32589-66

ACC NR: AT5023948

TABLE 1.

Content of Sr^{90} and Cs^{137} in the soil near the town of Petrokrepost' (millicuries/ km^2), and their ratio.

YEAR: (Год)	Sr^{90}	Cs^{137}	Cs^{137}/Sr^{90}
1958	8,4	11,2	1,3
1959	7,4	20,0	2,7
1960	7,6	26,5	3,5
1961	10,2	22,0	2,2
1962	14,1	38,5	2,7

TABLE 2.

Cumulative fallout of Sr^{90} and Cs^{137} in Octobers of 1958-1962, and their ratio.

YEAR: (Год)	Sr^{90}	Cs^{137}	Cs^{137}/Sr^{90}
1958	10,5	20,8	2,0
1959	13,8	26,6	1,9
1960	14,3	27,6	1,9
1961	15,2	27,8	1,8
1962	24,8	48,5	2,0

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L 32589-66

ACC NR: AT5023948

Sr^{90} content was determined by standard radiochemical methods, Cs^{137} - by the use of a gamma ray spectrometer with a 40x40mm NaJ(T1) crystal, and a multichannel amplitude and pulse analyzer AI-100. Table 1 shows the contents of Sr^{90} and Cs^{137} in the soil: The cumulative fallouts from the atmosphere are shown in Table 2. Observation of the results show that Sr^{90} is leached out by the precipitation and migrates down easier than Cs^{137}, which has a tendency practically to remain in the upper layer of the soil. Considering the fact that the soil retains, on the average, 1.7 times less Sr^{90} than the amount reaching the surface of the ground, and the results of experiments in artificial leaching-out of soil samples contaminated with Sr^{90}, one may arrive at the following conclusions. Sr^{90} penetrates into the lower layers of the soil together with the precipitaion. The depth of Sr^{90} penetration and its distribution depends upon the type of the soil, its physical and chemical features and the amount of precipitation. The orig. art. has 3 figures, 4 tables.

SUB CODE: 18,[illegible]; SUBM DATE: 28Apr65; ORIG REF: 002; OTH REF: 001

(18)

Card 3/3

VINOGRADOVA, V. M.

Morphology of Carduus lanuginosus Willd. Bot. zhur. 48 no.5: 759-760 My '63. (MIRA 17:1)

1. Botanicheskiy institut imeni V. L. Komarova AN SSSR, Leningrad.

VINOGRADOVA, V.M.

Apium leptophyllum (Pers.) F. Muell. (Umbelliferae), an incidental plant new in the flora of the U.S.S.R. Bot. zhur. 49 no.9:1345-1346 S '64. (MIRA 17:12)

1. Botanicheskiy institut im. V.D. Komarova AN SSSR, Leningrad.

CHERNOMORDIK, A.B.; KOVALENKO, A.D.; SMIRNOVA, T.V.; PONOMAREVA, V.G.;
MALYAR, O.Kh.; VINOGRADOVA, V.M.

Sensitivity of Proteus to some antibiotic and nitrofuran preparation.
Antibiotiki 5 no.1:81-83 Ja-F '60. (MIRA 13:7)

1. Dnepropetrovskiy nauchno-issleodvatel'skiy institut epidemiologii, mikrobiologii i gigiyeny imeni N.F. Gamalei.
(PROTEUS) (ANTIBIOTICS) (FURAN)

VINOGRADOVA, V.M.

Flora in the area of the Pym-Va-Shor hot springs in the Bol'shezemel'skaya tundra. Vest. LGU 17 no.9:22-34 '62. (MIRA 15:5)

(Bol'shezemel'skaya Tundra--Botany)

VINOGRADOVA, V. N. (Moscow)

"('Izbytochnoft') of ~~k~~ the Category of the Family of the Russian Verb."
Theses - Conference on Machine Translation, 15 - 21 May 1958, Moscow.

33265

5 3700 1273

S/062/62/000/001/004/015
B106/B101

AUTHORS: Yemel'yanova, L. I., Vinogradova, V. N., Makarova, L. G., and Nesmeyanov, A. N.

TITLE: Synthesis of aromatic germanium compounds by reaction of diaryl mercury with germanium diiodide

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh nauk, no. 1, 1962, 53-59

TEXT: Organic germanium compounds were synthesized by reaction of GeI_2 with diphenyl, di-p-tolyl, di-m-tolyl, di-o-tolyl, di-p-chloro-phenyl, di-m-chloro-phenyl, di-o-chloro-phenyl, di-p-bromo-phenyl, di-o-bromo-phenyl, di-p-methoxyphenyl, di-p-ethoxyphenyl, di-o-ethoxyphenyl, and di-β-naphthyl mercury. The reaction takes place when boiling equimolecular amounts of GeI_2 and Ar_2Hg in toluene for 15-30 min. The reaction products contain Hg, Hg_2I_2, HgI_2, $GeO_2(GeI_4)$, ArHgI, sometimes part of the initial Ar_2Hg, and the organogermanium compounds Ar_2GeI_2, Ar_3GeI, and $ArGeI_3$. The main products are the relevant diarylated germanium compounds which are obtained in a

X

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33265

S/062/62/000/001/004/015
B106/B101

Synthesis of aromatic germanium ...

yield of 40-75%, related to the admixture of aryl radical. Compounds of the Ar_4Ge type are not formed. The composition of the reaction products suggests that the reaction $Ar_2Hg + GeI_2 \longrightarrow Ar_2GeI_2 + Hg$ (I) takes place as the main reaction. Ar_3Ge is probably formed by further reactions following the pattern $Ar_2Hg + Ar_2GeI_2 \longrightarrow Ar_3GeI + ArHgI$ (II). This reaction is facilitated by the fact that both reactants are present in a dissolved form. In the presence of orthosubstituents in the Ar_2Hg molecule complicating reaction (II), no Ar_3GeI is formed. In some cases, a small amount of $ArGeI_3$ is formed, probably owing to the reaction $ArHgI + GeI_2 \longrightarrow ArGeI_3 + Hg$ (III). In a special experiment, the reaction of equimolecular amounts of C_6H_5HgI and GeI_2 boiled in toluene for 15 min was investigated. Similar to the reactions with Ar_2Hg, metallic mercury was deposited immediately. Apart from a small portion of the initial C_6H_5HgI, the reaction products contained 31.09% of $C_6H_5GeI_3$, 50.63% of $(C_6H_5)_2GeI_2$, Hg, Hg_2I_2, and GeI_4. Obviously, C_6H_5HgI reacts with GeI_2 like $(C_6H_5)_2Hg$

Card 2/4

33265
S/062/62/000/001/004/015
Synthesis of aromatic germanium ... B106/B101

following the pattern $C_6H_5HgI + GeI_2 \longrightarrow C_6H_5GeI_3 + Hg$; $C_6H_5HgI + C_6H_5GeI_3 \longrightarrow (C_6H_5)_2GeI_2 + HgI_2$; $2HgI_2 + GeI_2 \longrightarrow GeI_4 + Hg_2I_2$. The influence of the reaction conditions on the degree of arylation and on the yield of organogermanium compounds was also studied. Quantitative proportions and, above all, the sequence of combination of the reactants affect both the yield and the degree of arylation. To achieve a predominant formation of Ar_2GeI_2, Ar_2Hg must be added in portions to a small GeI_2 excess. An attempt to alkylate Ar_3GeI completely by boiling for many hours with the equimolecular amount of Ar_2Hg in absolute xylene failed. Ar_2Hg reacted only with Ar_3GeI to form ArHgI. The simultaneous formation of $(Ar_3Ge)_2O$ is probably caused by the oxidation of the ArGe radical by atmospheric oxygen. Separation of the organogermanium iodides, especially Ar_3GeI and Ar_2GeI_2, is sometimes difficult owing to their similar solubility. Therefore, the reaction products, or the residues remaining after the separation of the principal amounts of iodides were hydrolyzed in

X

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S/062/62/000/001/004/015
B106/B101

Synthesis of aromatic germanium ...

some cases from the mother liquors, and the resulting aryl germanium compounds were separated in the form of oxides. The molecular weight of some soluble diaryl germanium oxides was determined cryoscopically in benzene. There are 1 table and 9 references: 1 Soviet and 8 non-Soviet. The three most recent references to English-language publications read as follows: O. H. Johnson, D. M. Harris, J. Amer. Chem. Soc. 72, 5564 (1950); F. C. Whitmore, R. J. Sobatzki, J. Amer. Chem. Soc. 55, 1128 (1933); J. K. Simons, E. C. Wagner, J. H. Müller, J. Amer. Chem. Soc. 55, 3705 (1933).

X

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR (Institute of Elemental Organic Compounds of the Academy of Sciences USSR)

SUBMITTED: July 17, 1961

Table. Organic germanium compounds.
Legend: (1) substance; (2) m., °C; (3) obtained here; (4) according to published data; (5) solvent for crystallization; (8) n-heptane;

Card 4/7 4

VINOGRADOVA, V.N.

[Materials on experimental and clinical electrocardiography]
Materialy po eksperimental'no-klinicheskoi elektrokardiografii.
Moskva, Izd-vo Akad. Med. Nauk SSSR, 1953. 261 p. (MLRA 7:12)
(Electrocardiography)

LEVINA, R.Ya.; GODOVIKOVA, T.I.; VINOGRADOVA, V.N.

Synthesis of simple and compound ethers of 1-cyclopenten-3-ol.
Vest.Mosk.un.Ser.mat., mekh., astron., fiz., khim. 14 no.3:
171-175 '59. (MIRA 13:5)

1. Kafedra organicheskoy khimii Moskovskogo gosudarstvennogo
universiteta.
(Cyclopentenol)

VARDENBURG, A.K., kandidat tekhnicheskikh nauk; FILAGRIYEVSKAYA, T.D., inzhener; VINOGRADOVA, V.N., inzhener.

Water-emulsion insulating varnish. Vest.elektroprom.27 no.1:55-59 Ja '56. (MLRA 9:6)

1.Nauchno-issledovatel'skiy institut Ministerstva elektropromyshlennosti.
(Electric insulators and insulation)

VINOGRADOVA, V. N.

Moths

Particularities in the venation of the rear wings in the family Pyralidae (Lepidoptera). Vinogradova. Ent. ob. 31, No. 3, 1951.

9. **Monthly List of Russian Accessions**, Library of Congress, September 1952. Unclassified.

5.3400

~~5 (3)~~

68052

SOV/55-59-3-21/32

AUTHORS: Levina, R. Ya., Godovikova, T. I., Vinogradova, V. N.

TITLE: On the Synthesis of Ethers and Esters of Cyclopentene-1-ol-3 and Its Homologs

PERIODICAL: Vestnik Moskovskogo universiteta. Seriya matematiki, mekhaniki, astronomii, fiziki, khimii, 1959, Nr 3, pp 171 - 175 (USSR)

ABSTRACT: The present paper is a continuation of the investigation of the use of mono- and dichlorocyclopentenes in organic synthesis. From 3-cyclopentene and potassium acetate the authors obtained the ester 3-acet-oxy-cyclopentene-1 with a 60% yield. As the production of 3-ethoxy-cyclopentene was not possible with sodium ethylate, the latter was caused to react with 1,2-dibromocyclopentane, and the hitherto not described 3-ethoxy-cyclopentene-1 was obtained with a 35% yield. For the purpose of obtaining homologs of this compound, 1-methyl- and 1-ethyl cyclopentene-2 were produced by the action of organomagnesium compounds upon 1-chlorocyclopentene-2, after which it was transformed into dibromide and caused to react with sodium ethylate. As a result of allyl regrouping, a

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68052
SOV/55-59-3-21/32

On the Synthesis of Ethers and Esters of Cyclopentene-1-ol-3 and Its Homologs

mixture of alkoxy-alkyl cyclopentenes was obtained, the composition of which could be explained by means of the Raman spectra recorded by Ye. G. Treshchova; In the reaction 4 of the ethyl derivative 43% of 3-ethoxy-1-ethylcyclopentene-1 and 57% of 1-ethoxy-1-ethyl cyclopentene-2 had been formed. There are 5 references, 4 of which are Soviet.

ASSOCIATION: Kafedra organicheskoy khimii (Chair of Organic Chemistry)

SUBMITTED: January 2, 1959

Card 2/2

VINOGRADOVA, V.N.

Materials on the study of vegetable and vine crop pests of Tajikistan. Trudy AN Tadzh.SSR 5:57-65 '52. (MLRA 9:10)
(Tajikistan--Insects, Injurious and beneficial)(Vegetables--Diseases and pests)

YEMEL'YANOVA, L.I.; VINOGRADOVA, V.N.; MAKAROVA, L.G.; NESMEYANOV, A.N.

Synthesis of aromatic compounds of germanium by the interaction of diarylmercury with germanium diiodide. Izv. AN SSSR Otd.khim.nauk no.1:53-59 Ja '62. (MIRA 15:1)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Germanium organic compounds)

VINOGRADOVA, V.N.

USSR/Chemistry - Hydrocarbons 1 Jul 52

"Cyclopentadiene and Cyclohexadiene in the Synthesis of Bicyclic Hydrocarbons,"
R. Ya. Levina, T. I. Tantsyreva, V. N. Vinogradova, Ye. G. Treshchova

"Dok Ak Nauk SSSR" Vol LXXXV, No 1, pp 107-110

The reaction between magnesium and the hydrogen chloride adducts of cyclopentadiene and cyclohexadience-1,3 was used for the synthesis of 2,2' -dicyclopentenyl and 2.2'-dicyclohexanyl, which were treated with mercuric acetate and then KCl to obtain the corresponding HgCl derivs. Presented by Acad A. N. Nesmeyanov 30 Apr 52.

224T15

AUTHORS: Kochetkov, N. K. and Vinogradova, V. N. 79-2-40/58

TITLE: Ketovinylation of Thiophenols (Ketovinilirovaniye tiofenolov)

PERIODICAL: Zhurnal Obshchey Khimii, 1957, vol 27, No 2, pp. 460-464 (U.S.S.R.)

ABSTRACT:

This report is devoted to the study of the first reaction between beta-chlorovinyl ketones with thiophenols. A new method was developed for the synthesis of hitherto unknown aryl-beta-acylvinyl sulfides which are derived with high yields from the reaction of beta-chlorovinyl ketones with thiophenols in an alkali medium. It was established that during the ketovinylation of thiophenols, the actual reaction includes the sodium thiophenolate and is followed by nucleophilic substitution of the Cl atom in the molecule of the beta-chlorovinyl ketone under the effect of the thiophenolate ion. A study of certain reactions of these compounds showed a close similarity to other beta-substituted vinyl ketones. The aryl-beta-acylvinylsulfides $RCOCH = CHSAr$ obtained as a result of the reaction are described as colorless solid bodies easily separated from the reaction mixture by conventional means. All the synthesized sulfides showed good storage stability.

Card 1/2

Ketovinylation of Thiophenols. 79-2-40/58

There are 13 references, of which 10 are Slavic

ASSOCIATION: Moscow State University

PRESENTED BY:

SUBMITTED: February 21, 1956

AVAILABLE: Library of Congress

Card 2/2

VINOGRADOVA, V.N.

KOCHETKOV, N.K.; VINOGRADOVA, V.N.

Synthesis of aryl -β - ketones of vinylsulfones and aryl-β - ketones of vinylsulfoxides. Zhur.ob.khim. 27 no.10:2745-2750 O '57. (MIRA 11:4)

1.Moskovskiy gosudarstvennyy universitet.
(Ketones)

87125

5.3100 1236, 2209, 1273

S/062/60/000/009/018/021
B023/B064

AUTHORS: Nesmeyanov, A. N., Vinogradova, V. N., and Makarova, L. G.

TITLE: Production of Aromatic Selenium Compounds With Aryl Diazonium Boron Fluorides

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1960, No. 9, pp. 1710-1711

TEXT: The authors report on the synthesis of aromatic selenium compounds with boron fluorides of aryl diazonium. In the introduction, methods of synthesis applied by Western authors (Refs. 2, 3 and 4) are mentioned. By decomposing boron fluorides of aryl diazonium with zinc dust in the presence of selenium tetrachloride, in acetone, diaryl selenides with the following aryls were obtained: phenyl-, para-, and orthotolyl, parachloro phenyl and paramethoxy phenyl. In the case of aryl phenyl a small amount of diaryl diselenide was obtained. The yields were not large. Only in the case of aryl phenyl the yield reached 35-40%. In other cases the yields were smaller. Diaryl selenides were separated by vacuum distillation and with vapor. They were identified by being passed over into bromides.

Card 1/2

87125

Production of Aromatic Selenium Compounds With Aryl Diazonium Boron Fluorides

S/062/60/000/009/016/021
B023/B064

There are 12 references: 2 Soviet, 2 British, 1 French, 8 German, 1 Swedish, and 2 US.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR (Institute of Elemental-organic Compounds of the Academy of Sciences USSR)

SUBMITTED: February 17, 1960

Card 2/2

VARDENBURG, A.K., kand.tekhn.nauk; VINOGRADOVA, V.N., inzh.;
PETUKHOVA, N.A., inzh.; FILAGRIYEVSKAYA, T.D., inzh.

Problems concerning the automation and mechanization of saturation and drying processes of the windings of electric machinery. (MIRA 15:5)
Vest. elektroprom. 31 no.8:4-9 Ag '60.
(Electric machinery--Windings)
(Electric machinery--Drying)

ACCESSION NR: AP5006054 S/0139/65/000/001/0057/0061

AUTHOR: Vinogradova, V. N.; Godnev, I. N.

TITLE: On the applicability of the method of "progressing rigidity" to molecules $X(Hal)_4$ in light of the theory of characteristic frequencies

SOURCE: IVUZ. Fizika, no. 1, 1965, 57-61

TOPIC TAGS: tetrahedral molecule, halide, characteristic frequency, group IV element

ABSTRACT: The method of "progressing rigidity" was first proposed by M. Larnaudie (J. phys. et radium, v. 15, [illegible]). The present article is devoted to an anal-

[illegible]

[illegible]

Card [illegible]

L 39412-65
ACCESSION NR: AP5006054

2

force constants published in the literature, shows that the method of the "pro- [illegible] can be applied with good approximation to the molecules $X(Hal)_4$. [illegible] compared with the exist- [illegible] Mayants I. [illegible]

Card 2/2

VINOGRADOVA, V.N.; GODNEV, I.N.

Approximate computation of the noncharacteristic coefficients of the frequency and form of vibtrations in tetrahedral molecules and ions of $X(Hal)_4$. Opt. i spektr. 17 no.6:838-841 D '64. (MIRA 18:3)

VINOGRADOVA, V.N.; GODNEV, I.N.

Applicability of the method of "progressing rigidity" to $X(Hal)_4$ molecules in the light of the theory of characteristic frequencies. Izv. vys. ucheb. zav.; fiz. 8 no.1:57-61 '65.
(MIRA 18:3)

1. Ivanovskiy khimiko-tekhnologicheskiy institut.

L 44155-66 EWT(1)/FCC GW/GD

ACC NR: AT6027228 SOURCE CODE: UR/0000/66/000/000/0229/0255

AUTHOR: Vinogradov, P. A.; Vinogradova, V. N.

41

B+1

ORG: none

TITLE: Activity of the electrotelluric field

SOURCE: AN SSSR. Sibirskoye otdeleniye. Sibirskiy institut zemnogo magnetizma, ionosfery i rasprostraneniya radiovoln. Issledovaniya po geomagnetizmu i aeronomii (Studies in geomagnetism and aeronomy). Moscow Izd-vo Nauka, 1966, 229-255

TOPIC TAGS: geomagnetism, electrotelluric field, geomagnetic field, electrotelluric activity

ABSTRACT: The results are presented of a statistical investigation of activity of the electrotelluric field, based on observational data from 1944—1959. Three-point hourly characteristics and hourly amplitudes of the eastern component are used as a gage of the activity. Diurnal, annual, and cyclical changes of activity are analyzed, and the distribution of disturbances of various intensities during the 24-hr period are considered. The authors present the results of the comparison of activities of electrotelluric and geomagnetic fields, as well as the results of the investigation of activity, taking into account short-period oscillations. Some problems of latitudinal distribution of activity are considered. Orig. art. has: 22 figures and 12 tables. [JJ]

SUB CODE: 08/ SUBM DATE: 25Dec65/ ORIG REF: 019

Card 1/1 hs

VINOGRADOVA, V.O.

VINOGRADOVA, V.P.

Conference on the geology of polymetals of Central Asia. Izv.AN SSSR.Ser.geol. 21 no.5:125-127 My '56. (MLRA 9:8)

1. Ministerstvo geologii i okhrany nedr SSSR.
(Soviet Central Asia--Ore deposits)

VINOGRADOVA, V.P.; RADZIYEVSKIY, V.V.

Acceleration of the satellites of Mars and the stabilization of the orbits of artificial earth satellites. Astron.zhur. 42 no.2:424-432 Mr-Ap '65. (MIRA 18:4)

1. Yaroslavskiy gosudarstvennyy pedagogicheskiy institut im. K.D. Ushinskogo.

NABATOVA, K.A.; DYMSHITS, I.I.; DUBOV, A.F.; VINOGRADOVA, V.P.

Shot peening the transmission gears of the Moskvich automobile. Avt. i trakt. prom. no.6:29-31 J3 '56. (MLRA 9:9)

1. Nauchno-issledovatel'skiy avtomotornyy institut i Moskovskiy zavod malolitrazhnykh avtomobiley.
(Automobiles--Transmission devices) (Shot peening)

3.2300

38471
S/124/62/000/006/001/023
D234/D308

AUTHOR: Vinogradova, V. P.

TITLE: Distribution of angular momentum in the solar system

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 6, 1962, 4, abstract 6A13 (Uch. zap. Yaroslavsk. tekhnol. in-ta, 1961, 7, 143-154)

TEXT: Ye. Epik (1961) and V. V. Radziyevskiy (1952) showed that a rotating particle moving around the sun in its gravitational field is subject to an additional reaction force connected with anisotropic re-radiation of incident solar radiation by the particle. This force increases the radius of the orbit of the particle in the case of direct rotation and decreases it in the case of inverse rotation. For sufficiently large, slowly rotating particles, this effect can be much stronger than the well-known Poynting-Robertson radiation damping effect, which leads to a decrease of the orbit. Using a general expression for the reaction force deduced by V. V. Radziyevskiy, the author carries out an approximate calcu-

Card 1/2

Distribution of angular ...

S/124/62/000/006/001/023
D234/D308

lation of this force for particles and bodies of different sizes (from 10^{-2} to 10^{5} cm) as well as their periods of rotation. Tables are given for the velocity of variation of round-the-sun orbit radius in case of simultaneous action of re-radiation anisotropy effect and Poynting-Robertson effect. Reasoning is given regarding the possibility of redistribution of matter in a protoplanetary cloud under the influence of the above effects. 6 references. [Abstracter's note: Complete translation.]

Card 2/2

AUTHOR: [illegible]inogra[illegible], [illegible]

TITLE: [illegible] of artificial earth satellite orbits

SOURCE: Astronom[illegible] [illegible] 424-43[illegible]

TOPIC TAGS: Mars, [illegible] satellite, [illegible] planetary satellite, light pressure, [illegible]

ABSTRACT: It is demonstrated that the secular variations of the Martian satellites

L [illegible]

ACCESSION NR: AP501[illegible]436

due to its deceleration by the air would be greater than 10^8 ergs per [illegible] of its [illegible]

Poynting-Robertson effect, depending on the orientation of the satellite, there can be a [illegible]

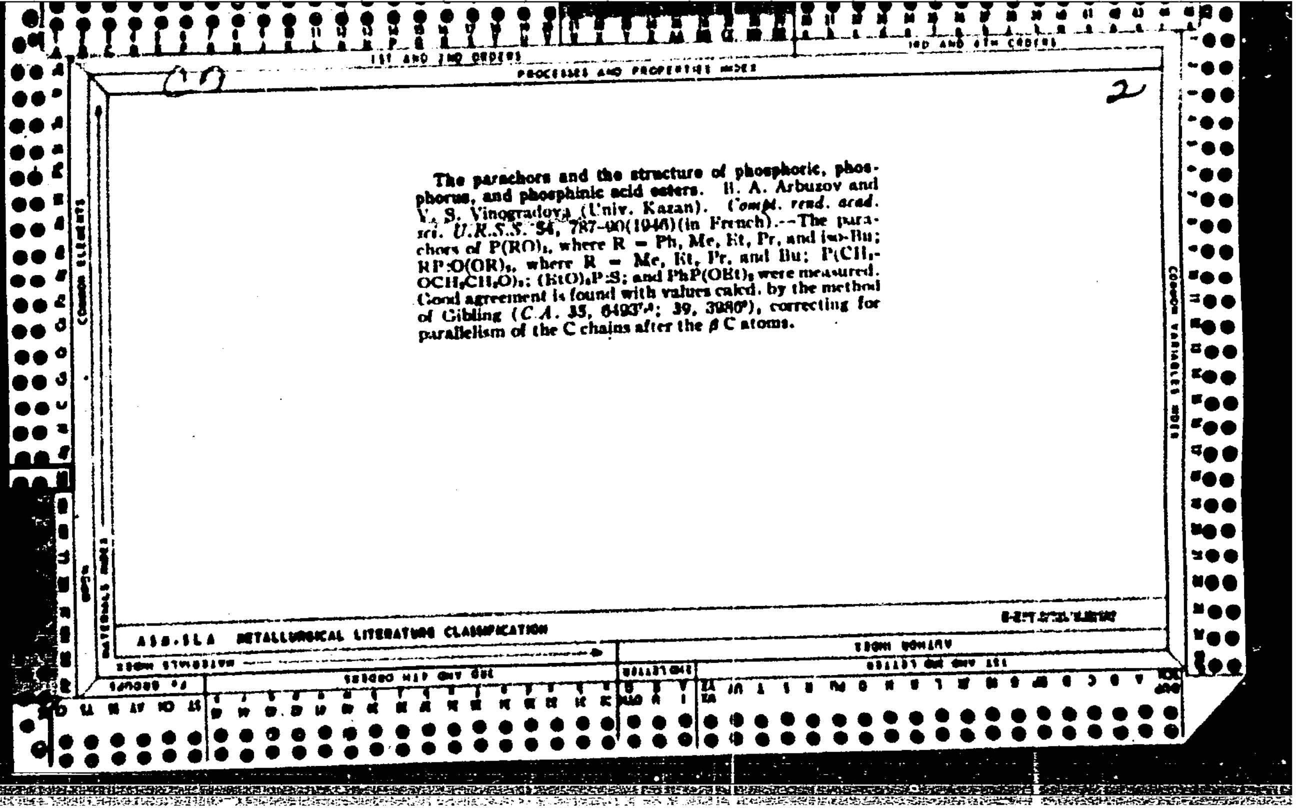
formulas, 1 figure, and 3 tables. [08]

ASSOCIATION: Yaroslavskiy gosudarstvennyy pedagogicheskiy institut imeni K. D. Ushinskogo (Yaroslavl State Pedagogic Institute)

SUBMITTED: 29Nov63 ENCL: 00 SUB CODE: AA, SV

NO REF SOV: 004 OTHER: 001 ATD PRESS: 3254

Card 2/2



1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

CA

2

The parachors and the structure of phosphoric, phosphorus, and phosphinic acid esters. B. A. Arbuzov and V. S. Vinogradova (Univ. Kazan). *Compt. rend. acad. sci. U.R.S.S.* 54, 787-90(1946)(in French).--The parachors of $P(RO)_3$, where R = Ph, Me, Et, Pr, and iso-Bu; $RP:O(OR)_2$, where R = Me, Et, Pr, and Bu; $P(CH_2OCH_2CH_2O)_3$; $(EtO)_3P:S$; and $PhP(OEt)_2$ were measured. Good agreement is found with values calcd. by the method of Gibling (*C.A.* 35, 6493^{7,8}; 39, 3980^{9}), correcting for parallelism of the C chains after the β C atoms.

ASA-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

CA

10

Parachors and structure of esters of phosphoric, phosphorous, and phosphonic acids. B. A. Arbuzov and V. S. Vinogradova (A. M. Butlerov Research Inst., Kazan State Univ.). *Bull. acad. sci. U.R.S.S., Classe sci. chim.* 1947, 450-72(in Russian); cf. *C.A.* 41, 6096g.—(1) The following esters were synthesized and their *surface tensions*, γ (dyne/cm.), at 20° detd. by the method of max. bubble pressure: $(BuO)_3PO$ 27.79, $(MeO)_3P$ 26.52, $(iso\text{-}BuO)_3P$ 23.70, $(EtO)_3P$ 24.26, $(PrO)_3P$ 25.91, $PhP(OEt)_2$ 31.95, $(PhO)_3P$ 42.40, $(EtO)_3PS$ 29.05, $PrPO(OPr)_2$ 28.08, $BuPO(OBu)_2$ 27.55, $(MeOCH_2CH_2O)_3P$ 34.79, $MePO(OMe)_2$ 36.70, $EtPO(OEt)_2$ 28.94. (2) From γ and the d., the exptl. parachors *P* were detd. and compared with the *P* calcd. by the procedure of Gibling (*C.A.* 35, 6493[7,8]; 37, 1308[1,2]; 39, 235[1], 3986[9]) involving "standard values" (*SV*) for groups and "expansion corrections" (*EC*) depending on the chain length. Using G.'s *SV* = 119.9 for $([C]O)_3PO$ and 149.8 for $([C]O)_3PS$, the calcd. *P* agree with the exptl. *P* for $(PhO)_3PO$ (686.4) and for $(EtO)_3PS$ (431.2) if corrections are applied to allow for the bending of the chains resulting in parallel alignment beyond the β-C atoms and in virtual 5-membered rings O:P.O.C.C. Similar agreement is found for $(iso\text{-}PrO)_3PO$ and $(iso\text{-}BuO)_3PO$. (3) From the exptl. *P* = 267.5 of $(MeO)_3P$, subtraction of 3 × 55.2 (for 3 Me) and of *EC* = 0.66, leaves for $([C]O)_3P$, *SV* = 101.27; with this value, agreement between the calcd. and the exptl. *P* for phosphites is obtained if the same corrections are applied as in the case of phosphates. While in the latter instance the parallel bending of the chains at the β-C atoms could easily be ascribed to polarization of the chains owing to resonance of the P:O bond, in phosphites the same effect can only arise owing to the presence of the electron pair at P; this necessitates assumption of a tetrahedral disposition of valencies around the tricovalent P, with the electron pair occupying the 4th corner of the tetrahedron, and leads to postulation of the existence of optically active antipodes of tricovalent N, P, and As. (4) In the case of phosphates of branched alkyls, the uncertainty as to whether the β-C correction should be applied to only one β-C in each chain or to all, was settled in favor of the latter alternative; e.g., for $(iso\text{-}PrO)_3PO$, the exptl. and calcd. *P* agree only if the correction is made for all six β-C atoms. The available data do not warrant a decision as to whether the correction for parallelism should be applied only to the principal chain or to both principal and lateral chains. For $(MeOCH_2CH_2O)_3P$ it is necessary to correct only for the parallelism of one atom (C or O). (5) From the *P* of phosphonates, applying the same correction for parallelism as in the case of phosphates, one finds for the group $([C]O)_2([C])PO$, *SV* = 93.7. The corrections allowing for the interaction between the resonating P:O bond and the alkyl linked directly to P, are different from those pertaining to the ester alkyls, and, for reasons of analogy, are closer to the corrections applied by Gibling to the bending of chains in esters of carboxylic acids. The structure of phosphonic acid esters resembles closely that of phosphates; it shows 3 virtual 5-membered

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION rings O:P.C.C.C. (6) Whereas the discrepancy between the exptl. *P* and the *P* calcd. according to Gibling is mostly 0.2-0.4% and only exceptionally as high as 0.7%, agreement with the *P* calcd. according to Samuel (*C.A.* 38, 3521') is much less satisfactory; in particular, in the case of alkanephosphonic acid esters, the deviation attains 1.5%. Calcn. according to Mumford and Phillips (*C.A.* 22, 1325; 24, 53) gives errors up to 2.6%. N. Thon

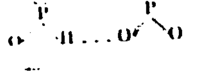
1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

CA

13

Parachors and the structure of dialkyl phosphorous acids. B. A. Arbuzov and V. S. Vinogradova. *Bull. acad. sci. U.R.S.S., Classe sci. chim.* 1947, 617-22 (in Russian).—In continuation of parachor studies on $(RO)_3P$ and $RPO(OR')_2$ (cf. *C.A.* 42, 3312a), the work was extended to $(RO)_2POH$, with the hope of elucidating the possible tautomeric structures. Using Gibling's method (*C.A.* 39, 2351), with the group value of PO_3H being 115.45 (calcd. from *P* of $(MeO)_2POH$), satisfactory agreement was obtained between observed and calcd. values up to the Bu ester, beyond which a const. deviation of 1.1% was observed. Application of a 2.2 unit correction for each C beyond the β-position gives somewhat better agreement, but such doubling of Gibling's standard β-C correction has no theoretical basis, as long as a monomeric structure of the esters is assumed. If a dimeric H-bonded ring structure is assumed, as discussed by Arbuzov, *et. al.* (*C.A.* 41, 5022), the chain interaction correction is applicable to 4 ester chains, i.e., a correction of 8.8 units per every 4 C atoms beyond β-C, i.e., 2.2 units per C atom is explicable. Use of this concept gives the ring-dimer group value for



of 229.8 *P* units. The agreement of the calcd. and observed *P* values in this case is excellent up to the octyl ester (highest studied) and the deviations are at most 0.6%, (the iso-Bu ester, if the parallelism correction is made only for the main chains). Use of Samuel's method (*C.A.* 38, 3521) with the calcn. made on the basis of monomeric structures for either tri- or pentavalent P (i.e. $(RO)_2POH$ or $(RO)_2PHO$), led to an av. *P* deviation of 1.1% for P^V forms and of 1.5% for P^{III} forms. Thus, the parachor could not be used to definitely establish the tautomeric configuration of these esters. The dialkyl phosphites were prepd. conventionally from ROH and PCl_3. The following values of surface tension, d., and *n* were found for the series. $(MeO)_2PHO$, b_{18} 55-5.5°, γ^{20} 37.21, d_4^{20} 1.2004, n_D^{20} 1.4036; $(EtO)_2PHO$, b_{18} 75°, 30.79, 1.0742, 1.4080; $(PrO)_2PHO$, b_{11} 91.5°, 29.21, 1.0184, 1.4172; $(iso\text{-}PrO)_2PHO$, b_9 69.5°, 26.62, 0.9981, 1.4088; $(BuO)_2PHO$, b_{16} 115°, 28.53, 0.9888, 1.4240; $(iso\text{-}BuO)_2PHO$, b_5 105°, 27.18, 0.9708, 1.4230; $(C_5H_{11}O)_2PHO$, b_{15} 145.6°, 28.38, 0.9486, 1.4335; $(C_6H_{13}O)_2PHO$, b_5 166-7°, 28.51, 0.9083, 1.4302; $(C_7H_{15}O)_2PHO$, b_1 100-1°, 29.25, 0.9296, 1.4420. It is noteworthy that a min. of surface tension exists between the Bu and Am esters, beyond which surface tension rises with increasing mol. wt. The following dialkyl phosphites are reported as new compds.: $(C_6H_{13}O)_2PHO$, by addn. of 6.7 g. PCl_3 to 15 g. $C_6H_{13}OH$ with ice cooling, followed by evacuation to remove HCl and distn. of the product (12 g.) in vacuo. $(C_7H_{15}O)_2PHO$, from 8 g. PCl_3 and 13.5 g. ice-cooled $C_7H_{15}OH$, followed by distn. in vacuo (yield not stated). $(C_8H_{17}O)_2PHO$, from PCl_3 and ice-cooled $C_8H_{17}OH$: from 18.7 g. PCl_3 there was obtained 18 g. pure ester, b_1 185-7°.

G. M. Kosolapoff

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

VINOGRADOVA, V.S.

ARBUZOV, B.A.; VONOGRADOVA, V.S.; POLEZHAYEVA, N.A.

Esters of -ketophosphinic acids. Report No.3: Structure of products of reaction of some haloketones with triethylphosphite and sodium diethylphosphide. Izv. AN SSSR. Otd.khim.nauk no.1:41-49 Ja '59. (MIRA 12:4)

1. Nauchno-issledovatel'skiy institut im. A.M. Butlerova Kazanskogo gosudarstvennogo universiteta im. V.I. Ul'yanova-Lenina. (Ketones) (Phosphites) (Phosphides)

VINOGRADOVA, V. S.

Sep/Oct 1947

USSR/Chemistry - Parachors
Chemistry - Esters

"Parachors and the Structure of Phosphoric Acid, Phosphorous Acid and Phosphinous Acid Esters," B. A. Arbuzov, V. S. Vinogradova, Sci Res Inst imeni A. M. Butlerov, Kazan State U, 13 pp

"Izv Akad Nauk SSSR, Otd Khim Nauk" No 5

Includes data on measurements of parachors of 13 esters of phosphoric, phosphorous and phosphinous acids, and compares them with parachors calculated by Mumford and Phillips and Samuel methods of group values.

PA 53T7

VINOGRADOVA, V. S.

Jan 1947

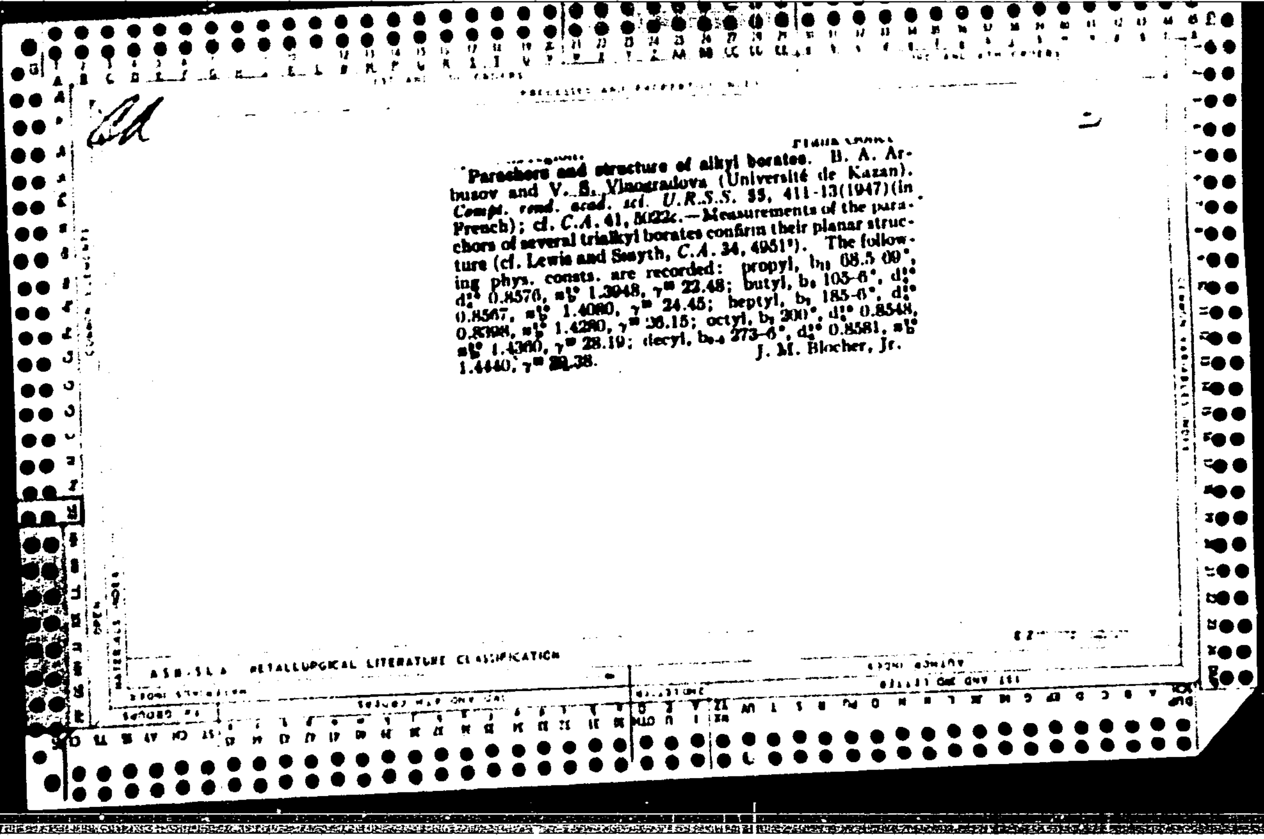
USSR/Chemistry - Phosphoric Acid, Dialkyl
Chemistry - Parachors

"Parachor and Structure of Dialkylphosphoric Acid," B. A. Arbuzov, V. S. Vinogradova, Sci Res Chem Inst imeni A. M. Butlerov, Kazan State U, 2 pp

"Dok Akad Nauk SSSR, Nova Ser" Vol LV, No 1

Describes experiments which produce data on parachors of dialkylphosphoric acid, fully confirming results on polymerizing ability of this acid in liquid condition.

PA 58T11



Cd

Parachors and structure of alkyl borates. B. A. Arbusov and V. S. Vinogradova (Université de Kazan). *Compt. rend. acad. sci. U.R.S.S.* 55, 411-13(1947)(in French); cf. *C.A.* 41, 8022c.—Measurements of the parachors of several trialkyl borates confirm their planar structure (cf. Lewis and Smyth, *C.A.* 34, 4951⁹). The following phys. consts. are recorded: propyl, b_{11} 08.5-09°, d_4^{20} d_4^{20} 0.8576, n_D^{20} 1.3948, $\gamma =$ 22.48; butyl, b_9 105-6°, d_4^{20} 0.8567, n_D^{20} 1.4080, $\gamma =$ 24.45; heptyl, b_7 185-6°, d_4^{20} 0.8398, n_D^{20} 1.4280, $\gamma =$ 26.15; octyl, b_7 200°, d_4^{20} 0.8548, n_D^{20} 1.4360, $\gamma =$ 28.19; decyl, $b_{0.4}$ 273-6°, d_4^{20} 0.8581, n_D^{20} 1.4440, $\gamma =$ 29.38.

J. M. Blocher, Jr.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

VINOGRADOVA, V. S.

Mbr., Scientific Research Institute of Chemistry im. Butlerov, Kazan State University, -1946-

"On the Complements and the Structure of the Ethers of Boric Acid." Dok. AN, 55, No. 5, 1947

VINOGRADOVA, V. S.

Oct 1947

USSR/Chemistry - Boric Acid
Chemistry - Esters

"Parachors of Substituted Esters of Boric Acid," B. A. Arbuzov, V. S. Vinogradova, Sci Res Inst imeni A. M. Butlerov, Kazan State U imeni V. I. Lenin, 4 pp

"Dok Akad Nauk SSSR" Vol LVIII, No 1

Concludes from data that parachors show the structure of esters of boric acid, which is in complete agreement with data of electro organic research. Favorable concurrence found between calculated and actual significance of parachors.

PA 52T15

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

B

26

Parachors and Structures of Boric Acid Esters. (In Russian.) B. A. Arbuzov and V. S. Vinogradova. *Zhurnal Fizicheskoi Khimii* (Journal of Physical Chemistry), v. 21, Mar. 1948, p. 303-309.

Describes synthesis of three of the above esters not previously reported. Gives data on molecular parachors of six of these esters, and discusses structural considerations. 12 ref.

COMMON ELEMENTS

COMMON VARIABLES INDEX

OPEN

MATERIALS INDEX

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

3RD AND 4TH ORDERS

2ND LETTER

AUTHOR INDEX

1ST AND 2ND LETTER

VINOGRADOVA, V. S.

USSR/Chemistry - Boric Acid, Esters of
Chemistry - Parachors

Mar 1948

"Parachors and Structure of the Esters of Boric Acid," B. A. Arbuzov, V. S. Vinogradova, Chem Sci Res Inst, Kazan State U, 6 pp

"Zhur Fiz Khim" Vol XXII, No 3

Measures parachors of six esters of boric acid. Compare these values with values calculated by the Gibling "group values" method. Variation between the two does not exceed 0.5%. Make conclusions on the structure of boric acid esters on the basis of the parachor findings. Submitted 16 Apr 1947.

PA 65T21

VINOGRADOVA, V. S.

USSR/Chemistry- Orthoformic Acid, Esters of May 1948
Chemistry- Parachors

"Parachors and Structure of Orthoformic Esters, Orthocarbonic and Orthosilicic Acids," B. A. Arbuzov, Corr Mem Acad Sci USSR, V. S. Vinogradova, Chem Inst imeni A. M. Butlerov, Kazan State U imeni V. I. Ul'yanov-Lenin, 3¼ pp

"Dok Ak Nauk SSSR " Vol LX, No 5

In previous articles dealing with subject it was stated that corrections were necessary for curve of chains in a direction toward central atom as well as for interrelationship between components. Reports results of studies conducted to determine value of parachors of orthoformic esters with corrections made on carbon atom of each chain, as well as corrections to parallel nature of the carbon atom. Submitted 16 Mar 1948.

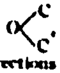
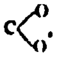
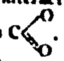
PA 68T17

A

Parachors of cyclic acetals. B. A. Arbuzov and V. S. Vinogradova (Kazan State Univ.). *Izvest. Akad. Nauk S.S.S.R., Otdel. Khim. Nauk* 1950, 291-6; cf. *Doklady Akad. Nauk S.S.S.R.* 58, 63(1947); *C.A.* 42, 5735e, 5844h, 8556d.—The parachor of 1,3-dioxane (I) was detd. experimentally to be 205.21, that of dioxalane $OCH_2OCH_2CH_2$ (II) to be 168.1. The difference, 37.0, is very close to the 36.7 calcd. on the assumption that passage from a six-membered to a five-membered ring should decrease the standard group parachor of CH_2, 42.0, by 5.3. Consequently, the ring correction valid for carbocyclic compds. is applicable also to oxygenated heterocycles. The parachors calcd. from the ideal group parachors, with the corresponding ring corrections (10.7 and 5.4 for the six- and the five-membered ring, resp.) are 211.11 and 174.26, for I and II, resp.; the deviation, av. 6.0, is attributed to the O atoms, and leads to the introduction of a correction of −3.0 for each O atom in the heterocyclic ring. With this correction, and the previously established corrections for the interaction between the side chain and the ring, and between the side chains, the calcd. parachors are in very good agreement (deviation not exceeding 0.4%) with the following experimentally detd. parachors: 4-methyl-1,3-dioxane 244.6; 2-methyl-1,3-dioxane 243.3; 2-methyldioxalane 207.0; 2-phenyldioxalane 342.3; 2,4-dimethyl-1,3-dioxane 282.5; 1,4-dioxane 205.4; 2-phenyl-1,3-dioxane 378.7. Cf. following abstr.

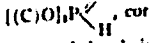
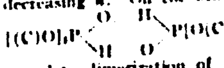
N. Thon

CA

Parachors of the cyclic esters of carbonic, sulfurous, and phosphorous acid. B. A. Arbuzov and V. S. Vinogradova (Kazan State Univ.). *Izvest. Akad. Nauk S.S.S.R., Otdel. Khim. Nauk* **1950**, 297-303; *cf.* preceding abstr.—The exptl. value of the parachor of ethylene glycol carbonate $\underbrace{CH_2OCOOCH_2}$, 179.0, is in agreement (within 0.5%) with the 179.9 calcd. with 107.0 taken for the ideal group parachor of (C)OCOO(C); the latter value is obtained from the group parachor, 85.5, with the corrections −5.2 for the interaction of atoms in , −3.7 in , and −3.7 in . Further corrections applied are −5.4 for the five-membered ring, and −6.0 for the 2 O atoms in the ring (*cf.* preceding abstr.). By the same procedure, the parachor of trimethylene glycol carbonate $\underbrace{CH_2CH_2OCOOCH_2}$ is calcd. to be 216.7, within 0.5% of the exptl. 217.8, and that of $\underbrace{CH_2CH_2OCOOCHMe}$ is calcd. to 254.0, within 0.2% of the exptl. 254.4. For the group (C)OSOO(C), the ideal group parachor is estd. to be 121.5, which, with the usual corrections for the ring and the 2 O atoms, fits the parachors of $\underbrace{CH_2OSOOCH_2}$ (calcd. 194.4, exptl. 194.3) and $\underbrace{CH_2CH_2OSOOCH_2}$ (calcd. and exptl. 231.3). In an analogous way, the ideal group parachor of [(C)O]$_3$P in five- and 6-membered rings is calcd. to be 109.7; with this value, and the usual corrections, the calcd. parachors agree within better than 0.8% with the exptl. values: $\underbrace{CH_2OP(OMe)OCH_2}$ 244.08, $\underbrace{CH_2OP(OEt)OCH_2}$ 281.4, $\underbrace{CH_2CH_2OP(OMe)OCHMe}$ 319.6, $\underbrace{CH_2CH_2OP(OEt)OCHMe}$ 353.4.

N. Thon

CA

Parachors and structure of dialkylphosphorous acids. B. A. Arbuzov and V. S. Vinogradova (V. I. Ul'yanov-Lenin State Univ., Kazan, U.S.S.R.). *Doklady Akad. Nauk S.S.S.R.* **72**, 695-8(1950). In the series $(C_nH_{2n+1}O)_2POH$, *n* = 1-8, the mean increment, Δ, of the parachor per CH_2 group is 39.6, close to the normal value of 39.8. The higher members have Δ = 40.2, which corresponds to parachors *P* of the order of 400-700, whereas if these higher members were dimerized, one should expect *P* = 1200-1500 and Δ = 40.8-41.1. Absence of assocn. in $(C_8H_{17}O)_2POH$ was confirmed by cryoscopy in C_6H_6. In contrast thereto, $(MeO)_2POH$ is assocd. and is monomeric only in very dil. soln. From the exptl. *P* = 764.0 of the authentically monomeric $(C_8H_{17}O)_2POH$, the group parachor of  $[(C)O]_2P\overset{O}{\underset{H}{<}}$, corrected for expansion, bending, and interaction of the chains, is 107.3. Comparison of the *P* values calcd. with this new group parachor, with the exptl. *P*, shows that only the members with *n* = 8, 7, and 6, are monomeric. For the lower members, deviations between the calcd. and the exptl. *P* indicate assocn., increasing with decreasing *n*. On the other hand, if the group parachor  $[(C)O]_2P\overset{O\;\;H}{\underset{H\;\;O}{<\;\;>}}P[O(C)]_2$ is calcd. on the assumption of complete dimerization of $[(MeO)_2POH]_2$, it is found = 220.8, and then comparison of the calcd. and the exptl. *P* indicates increasing dissocn. of the dimer to monomers with increasing *n*. The per cent deviation becomes const., −1.7%, from *n* = 6 up, which confirms that the members with *n* = 6, 7, and 8, are completely monomeric. On that basis, the percentage of monomer at 20° can be roughly estd. to be 65% in $(iso\text{-}BuO)_2POH$, 70% in $(BuO)_2POH$, and 40% in $(PrO)_2POH$. The exptl. values of *P* for the $(RO)_2POH$ are: R = Me, 452.65; Et, 605.3; Pr, 758.0; iso-Pr, 755.0; Bu, 909.4; iso-Bu, 908.2; C_6H_{13}, 1216.0; C_7H_{15}, 1372.0; C_8H_{17}, 1528.0. N. Thon

VINOGRADOVA, V. S.

"Parachor and Structure of Esters of Some Inorganic Acids," Ucheniye Zapiski Kazansk Gos. Univ. im. V. I. Ul'yanov (Lenin), 110, No.9, pp. 5-82, 1950

Evaluation B 3,075,646 Translation in Library

CA

The parachor and the structure of esters of phosphoric, phosphorous, and thiophosphoric acid. B. A. Arbuzov and V. S. Vinogradova (Kazan State Univ.). *Izvest. Akad. Nauk S.S.S.R., Otdel. Khim. Nauk* 1951, 733-40; cf. *C.A.* 42, 3312a.—On the basis of parachor calcns. with corrections for chain parallelism (cf. Gibling, *C.A.* 39, 235[1]), it is concluded that the $(RO)_3PO$ structure involves a parallel position of all 3 R chains. The thiophosphates, $(RO)_3PS$, possess a similar structure. However, phosphites, $(RO)_3P$, probably carry only 2 chains in parallel positions, indicating the necessity for a strongly polar group (PO or PS) to extend the structure of the entire mol. $POCl_3$ (10 g.), 20 g. $C_6H_{13}OH$, and 15.4 g. pyridine in 100 ml. Et_2O, with cooling, gave 7 g. $(C_6H_{13}O)_3PO$, b_2 187-8°, n_D^{20} 1.4340, d_4^{20} 0.9398, γ^{20} 29.04 (dynes/cm.), [P] 857.16 (within 0.1% of the calcd. value for 3 parallel chains). Similarly, 25 g. $C_8H_{17}OH$, 10 g. $POCl_3$, and 15.2 g. pyridine gave $(C_8H_{17}O)_3PO$, b_2 225-7°, n_D^{20} 1.4410, d_4^{20} 0.9200, γ^{20} 29.02, [P] 1094.7; prepn. with $PhNMe_2$ as the HCl-binding agent gave an undistillable product. Addn. of S to $(PrO)_3P$ gave $(PrO)_3PS$, b_{10} 123.5-4.5°, d_4^{20} 1.0177, n_D^{20} 1.4502, γ^{20} 28.47, [P] 545.4; heating $(BuO)_3P$ (20 g.) with 2.2 g. S to 180-200° gave $(BuO)_3PS$, b_{11} 158-9°, $b_{11.5}$ 160-1.5°, d_4^{20} 0.9871, n_D^{20} 1.4515, γ^{20} 28.36, [P] 660.2. Similarly were prepd. $(C_6H_{13}O)_3PS$, $b_{2.5}$ 188-8.5°, d_4^{20} 0.9501, n_D^{20} 1.4568, γ^{20} 28.68, [P] 892.6, and $(C_8H_{17}O)_3PS$, b[illegible] 224-6° (distn. at higher pressure gives decompn.), d_4^{20} 0.9293, n_D^{20} 1.4592, γ^{20} 29.11, [P] 1126.4. BuOH, PCl_3, and pyridine gave $(BuO)_3P$, b_{12} 121.5°, d_4^{20} 0.9133, n_D^{20} 1.4327, γ^{20} 27.67, [P] 619.6. Similar reaction with $C_6H_{13}OH$ gave a mixt. of products which after repeated distn. yielded $(C_6H_{13}O)_3P$, b_1 167-8°, d_4^{20} 0.9002, n_D^{20} 1.4405, γ^{20} 27.86, [P] 853.5 (intermediate between 2 and 3 parallel chain structure); prepn. of the ester by heating 19.6 ml. $C_6H_{13}OH$ with 7.5 g. $(EtO)_3P$ and 1 drop H_3PO_4 (d. 1.8), with distn. of the EtOH, gave 5 g. pure $(C_6H_{13}O)_3P$, b_1 157-7.5°, d_4^{20} 0.8981, n_D^{20} 1.4428, γ^{20} 27.82, [P] 856.1 (very close to the structure requirement for 2 parallel chains). Similarly, $(C_8H_{17}O)_3P$, prepd. from PCl_3 (as above), b_1 210°, d_4^{20} 0.8930, n_D^{20} 1.4460, gave [P] 1084.1 (intermediate value), while that prepd. from $(EtO)_3P$, b_1 212-14°, d_4^{20} 0.8907, n_D^{20} 1.4475, γ^{20} 28.90, gave [P] 1080.8 (very close to 2-chain parallelism). Similarly $(C_9H_{19}O)_3P$ (from $(EtO)_3P$), b_1 226.5-7.5°, d_4^{20} 0.8879, n_D^{20} 1.4495, γ^{20} 29.39, gave [P] 1208 (very close to the requirement for 2-chain parallelism). $(C_{10}H_{21}O)_3P$, prepd. from PCl_3, b_1, 263°, d_4^{20} 0.8858, n_D^{20} 1.4500, γ^{20} 29.76, gave [P] 1325.7, while the product from $(EtO)_3P$, $b_{1.5}$ 236.5-7.5°, d_4^{20} 0.8842, n_D^{20} 1.4518, γ^{20} 29.99, gave [P] 1330.2 (very close to 2-chain parallelism). $PhCH_2CH_2OH$ (36 g.), 13 g. PCl_3, and 36 g. $PhNMe_2$ gave 18 g. $(PhCH_2CH_2O)_3P$, b_1 256-8°, d_4^{20} 1.1080, n_D^{20} 1.5596, γ^{20} 41.37, [P] not calcd. G. M. K.

VINOGRADOVA, V. S.

USSR/Chemistry - Organic Antimony Compounds Sep/Oct 51

"Preparation of Antimonous Acid Esters by Re-esterification Reaction," B. A. Arbuzov, V. S. Vinogradova, Chem Sci Res Inst imeni A. M. Butlerov, Kazan' U imeni V. I. Ul'yanov-Lenin

"Iz Ak Nauk SSSR, Otdel Khim Nauk" No 5, pp 551-553

Found it possible to prep higher esters of antimonous acid by re-esterification of lower esters of antimonous acid with higher alcs and distng off of lower alcs. By this method prepd n-hexyl, n-octyl,

195T12

USSR/Chemistry - Organic Antimony Compounds (Contd) Sep/Oct 51

n-nonyl, n-decyl, benzyl, β-phenylethyl, and cyclohexyl esters of antimonous acid (none of these described in the literature).

195T12

VINOGRADOVA, V. S.

Chemical Abst.
Vol. 48 No. 9
May 10, 1954
Organic Chemistry

2

②

Cetyl esters of some inorganic acids. B. A. Arbuzov and N. S. Vinogradova. *Bull. Acad. Sci. U.S.S.R., Div. Chem. Sci.* 1952, 483-4(Engl. translation).—See *C.A.* 47, 4835*d*.
H. L. H.